

**REMARKS****Status of the Claims**

Claims 27-28 are added, which find support throughout the specification. No new matter has been added. Upon entry of this amendment, claims 1-28 will be pending, with elected claims 21-28 under examination.

**Rejections- 35 U.S.C. § 103 (a)**

**Tada et al. and Kleber-Janke et al. do not render the present invention unpatentable.**

Claim 21 remains rejected under 35 U.S.C. § 103 (a) as allegedly unpatentable over Tada et al. in further view of Kleber-Janke et al. The Office has maintained the rejection of claim 21 on the grounds that the combination of references allegedly renders the present invention obvious. Applicants respectfully traverse this rejection on the grounds that the reasons made of record fail to establish a reason for combining the cited art and the combination of references do not render the present invention obvious.

In order to establish a *prima facie* case of obviousness, there must be some suggestion or motivation to combine reference teachings. “The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination.” MPEP § 2143.01 (emphasis in original). The Office maintains that Kleber-Janke et al. allegedly teaches homologous regions common to more than one *Ara h* allergen gene. See Advisory Action of October 15, 2003, page 2. Moreover, the Office posits that since Tada et al allegedly teaches antisense suppression of a 16 KDa rice allergen, one of skill in the art would have been motivated to identify a homologous region from more than one *Ara h* allergen gene and then clone the identified *Ara h* homologous region gene in the antisense orientation for peanut transformation using the combined teachings of Kleber-Janke et al. and Tada et al.. See Advisory Action, page 2.

A motivation to combine teachings of various references cannot be established by merely implying one of ordinary skill in the art is capable of creating the claimed invention

from bits and pieces of the documents of record. MPEP § 2143.01. Nor can the motivation be established by discussing how the teachings of the references may allegedly be combined. MPEP § 2143.01. Identifying ingredients and forms within the teachings of references cannot be equated with a motivation to combine those teachings. Since the Office has failed to provide any basis for the desirability of combining the cited references, the rejection is improper. For this reason alone, the rejection should be withdrawn.

The Office asserts “[o]ne of ordinary skill in the art would have been motivated to identify a homologous region from more than one *Ara h* allergen gene.” See Advisory Action, page 2. Yet, the Office has failed to provide a reason why one skilled in the art, absent knowledge of the present invention, would be motivated to identify a homologous region from more than one *Ara h* allergen genes and then clone an identified *Ara h* homologous region in the antisense orientation into a vector for peanut transformation. As neither Tada et al. nor Kleber-Janke et al., alone or together, disclose a method for producing a transgenic peanut plant with reduced or undetectable allergen protein content in the seed, the cited art does not render the present invention unpatentable.

**The combination of references does not render the present invention obvious.**

The Office maintains the position that the combined teachings of Tada et al. and Kleber-Janke et al. allegedly renders the present invention obvious. See Advisory Action, page 2. Applicants traverse this rejection on the grounds that neither reference discloses a method for producing a transgenic peanut plant with reduced allergen content in the seed. It follows, therefore, that the combination of Tada et al. and Kleber-Janke et al. do not render the present invention obvious.

Neither Tada et al. nor Kleber-Janke et al., alone or together, teach or even suggest identifying a region homologous to more than one *Ara h* gene and then cloning the homologous *Ara h* region in the antisense orientation for peanut transformation. In contrast, Tada et al. discloses “14-16 kDa allergens are multigene products” and “[m]ore than 10 homologous cDNA clones encoding the 14-16 kDa allergens have been identified” (See Tada

et al., page 341, first column). Yet, despite this explicit disclosure, Tada et al. neither teaches nor suggests identifying a region homologous to more than one allergen for cloning in the antisense orientation. In fact, Tada et al. teaches a single clone denoted as RA17( *See* Tada et al., page 341, second column) for cloning in the antisense orientation. Furthermore, Kleber-Janke et al. neither teaches nor suggests identifying a region homologous to more than one *Ara h* gene and transforming a peanut with an antisense *Ara h* construct. While Kleber-Janke et al. may have identified regions homologous to more than one *Ara h* gene, nowhere does the reference discuss transforming a peanut plant with an antisense *Ara h* gene, let alone a region homologous to more than one *Ara h* gene. As one would expect from an article published in *International Archives of Allergy and Immunology*, Kleber-Janke et al. only discloses the sequence of *Ara h* genes in the context of IgE-binding properties and patient reactivity profiles, not in the context of transgenic plants having reduced allergen content. Therefore, even if the Examiner had established a motivation to combine the references, the combination of references would not render the instant invention obvious. Again, for this reason alone, the rejection should be withdrawn.

While Tada et al. may use antisense technology for reducing 14-16 kDa proteins in rice, neither Tada et al. nor Kleber-Janke et al. disclose a method for producing a transgenic peanut plant with reduced allergen content in the seed. At best, Tada et al. discloses that antisense may be applicable to crop plants, but the disclosure of a genus does not necessarily render each species within that genus *prima facie* obvious. *See In re Jones*, 21 U.S.P.Q.2d 1941 (Fed. Cir. 1992). The genus of crop plants is too large to inherently describe every member within it. *Cf. MPEP § 2144.08 II. A 4 a.* “Some motivation to select the claimed species or subgenus must be taught by the prior art.” *Id.* Yet Tada et al. fails to identify any crop plant. The silence of Tada et al. cannot provide a motivation to select any particular species. Since neither Tada et al. nor Kleber-Janke et al. disclose a method for producing a transgenic peanut plant with reduced allergen content, the combination of references do not render the present invention obvious.

**An obviousness rejection can not be based upon unqualified hindsight reasoning.**

To prevent the use of hindsight based on the invention to defeat patentability of an invention, the Federal Circuit requires the PTO to show a motivation to combine the references that create the case of obviousness. In other words, the PTO must show reasons that the skilled artisan, confronted with the same problems as the inventor and lacking knowledge of the claimed invention, would choose the elements from the cited references for combination in the manner claimed. *In re Rouffet*, 47 USPQ2d 1453, 1457-8 (Fed. Cir. 1998). Importantly, with respect to this motivation, the Federal Circuit placed the burden on the PTO to present "clear and particular" evidence showing motivation to combine. *In re Dembicczak*, 50 USPQ2d 1614 (Fed. Cir. 1999).

Since the Examiner has not established a motivation or desirability for combining the teachings of the references, the Examiner has merely used Applicants' specification as a hindsight road map to recreate the claimed invention. To prevent the use of hindsight, "[t]he initial burden is on the examiner to provide some suggestion of the desirability of doing what the inventor has done." *See* MPEP § 2142. That has not been done in this case.

In summary, none of the cited references, alone or together, disclose a method for identifying a region homologous to more than one *Ara h* gene and transforming a peanut plant with an antisense *Ara h* homologous region. As a result, there is no *prima facie* case of obviousness established with respect to claims 21-26.

## CONCLUSION

As the above-presented amendments and remarks address and avoid all of the rejections presented by the Examiner, withdrawal of the rejections and allowance of the claims are respectfully requested. No new matter has been added.

If there are any questions concerning this application, the Examiner is courteously invited to contact the undersigned counsel.

Respectfully submitted,

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